

UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

TELEPHONE
(312) 858-2660

A. RO Inspection Report No. 050-331/74-05

Transmittal Date : March 22, 1974

Distribution:

RO Chief, FS&EB

RO:HQ (5)

DR Central Files

Regulatory Standards (3)

Licensing (13)

RO Files

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L:D/D for Fuels & Materials

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B. RO Inquiry Report No. _____

Transmittal Date : _____

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RO Chief, FS&EB

RO:HQ (5)

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Regulatory Standards (3)

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C. Incident Notification From: _____

(Licensee & Docket No. (or License No.))

Transmittal Date : _____

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RO Chief, FS&EB

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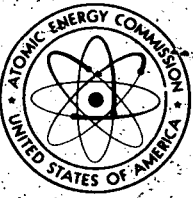
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MAR 22 1974

Iowa Electric Light and Power Company
ATTN: Mr. Charles W. Sandford
Vice President, Engineering
Security Building
P. O. Box 351
Cedar Rapids, Iowa 52405

Docket no. 50-331

Gentlemen:

This refers to the inspection conducted by Mr. Lonergan of this office on February 18-19, 1974, of activities at the Duane Arnold Energy Center authorized by AEC Construction Permit No. CPPR-70 and to the discussion of our findings with you and others of your staff at the conclusion of the inspection.

A copy of our report of this inspection is enclosed and identifies the areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, interviews with plant personnel, and observations by the inspector.

No violations of AEC requirements were identified within the scope of this inspection. However, certain items in the Duane Arnold Energy Center Emergency Plan were identified as needing further action. These items, contained in Paragraphs 3.f and 4 of the Report Details Section of the enclosed inspection report are to be completed prior to power ascension. It is our understanding that appropriate action will be taken in these matters. We will examine these actions during a subsequent inspection.

In accordance with Section 2.790 of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the AEC's Public Document Room. If this report contains any information that you or your contractors believe to be proprietary, it is necessary that you make a written application to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. Any such application must include a full statement of the reasons for which it is claimed that the information is proprietary, and should be prepared so the proprietary information identified in the application is contained in a separate part of the document. Unless we receive an application to withhold information or are otherwise contacted within the specified time period, the written material identified in this paragraph will be placed in the Public Document Room.

Iowa Electric Light and Power
Company

- 2 -

MAR 22 1974

No reply to this letter is necessary; however, should you have any questions concerning this inspection, we will be glad to discuss them with you.

Sincerely yours,

James G. Keppler
Regional Director

Enclosure:

RO Inspection Rpt No. 050-331/74-05

bcc: RO Chief, FS&EB
RO:HQ (4)
Licensing (4)
DR Central Files
RO Files
PDR
Local PDR
NSIC
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OGC, Beth, P-506A

U. S. ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS

REGION III

Report of Emergency Planning

RO Inspection Report No. 050-331/74-05

Licensee: Iowa Electric Light & Power Company
Security Building
P. O. Box 351
Cedar Rapids, Iowa 52405

Duane Arnold Energy Center
Palo, Iowa

License No. CPPR-70
Category: B

Type of Licensee: BWR - 538 Mwe

Type of Inspection: Special, Announced

Dates of Inspection: February 18 and 19, 1974

Dates of Previous Inspection: January 29-February 1, 1974
(Emergency Planning)

Principal Inspector:

G. T. Loneragan
G. T. Loneragan

3/19/74
(Date)

Accompanying Inspector: None

Other Accompanying Personnel: None

Reviewed By: *J. A. Pagliaro*
J. A. Pagliaro, Senior Environmental
Scientist, Environmental and Special
Projects Section

3/21/74
(Date)

SUMMARY OF FINDINGS

Enforcement Action: None.

Licensee Action on Previously Identified Enforcement Items

No previously identified enforcement items within the scope of this inspection.

Unusual Occurrences: None.

Other Significant Findings

A. Current Findings

This inspection was directed primarily toward those items identified in the previous inspection report^{1/} as requiring action prior to fuel loading (Phase I).

With the exception of completion of stocking of the first aid room in the administration building, the licensee has been responsive to the commitments made in the previous inspection report.^{2/} A description of the current status of this item is contained in Paragraph 3f of the Report Details Section.

B. Status of Previously Reported Unresolved Items

No previously reported unresolved items were identified within the scope of this inspection.

Management Interview

A management interview was conducted with Messrs. Sandford, Hammond, Ward, Root, Graybeal, Wilson, Rehrauer, and Cook, all of IELP and Messrs. Straight and Balodis of Bechtel at the conclusion of the inspection on February 19, 1974, at DAEC.

The inspector discussed the scope of the inspection (Paragraph 2) and summarized the findings of this inspection. (Paragraphs 3, 4, 5, 6, and 9)

^{1/} RO Inspection Report No. 050-331/74-04.

^{2/} Ibid.

REPORT DETAILS

1. Personnel Contacted

C. Sanford, Executive Vice President, IELP
L. Straight, Project Startup Coordinator, Bechtel
L. Root, Assistant Project Manager, IE
V. Balodis, SFHO Project Startup Supervisor, Bechtel
R. Graybeal, Radiation Protection Engineer, IE
D. Wilson, Results Engineer, IE
H. Rehrauer, Chairman, DAEC Safety Committee, IE
E. Hammond, Assistant Chief Engineer, IE
G. Cook, Manager QA, IE
G. Ward, Licensing Coordinator, IE
K. Meyer, Engineering, DAEC
J. Cimburek, Engineering, DAEC
J. Mathews, Preoperational Test Engineer, Bechtel
D. Harrington, Technician, Instrumentation Group, IE
D. Flanagan, Electrical Engineer, IE
E. Davis, Meteorological Consultant, TRC

2. General

This inspection included a review of those items identified in RO Inspection Report No. 050-331/74-04 as requiring action prior to fuel loading and a review of certain preoperational tests of systems which would be necessary for implementation of the DAEC Preparedness Plan. In addition, the current status of those items identified in the previous inspection report as requiring action prior to Phase IV were reviewed. No unresolved items were identified during this inspection.

3. Status of Items Identified in Previous Inspections to be Completed Prior to Fuel Loading

RO Inspection Report No. 050-331/74-04 identified certain items to be accomplished prior to fuel loading (Phase I). A description of the status of those items at the time of this inspection is provided below:

a. Placement of Respiratory Protective Devices

Placement of respiratory protective devices in a location readily accessible to those individuals who will be directly involved in fuel loading activities was accomplished on February 19, 1974. The accomplishment of the above action is in response to item 5a in the Report Details Section of RO Inspection Report No. 050-331/74-04.

b. Approval of Preparedness Plan Implementing Procedures (PPIP's)

Management approved copies of eighteen PPIP's were available. This action is in response to item 5b in the Report Details Section of RO Inspection Report No. 050-331/74-04.

c. Test of the Emergency Plan

- (1) The conduct of an emergency drill to include an evacuation and accounting of all IE and GE personnel in accord with PPIP.1 had not been completed at the time of this inspection. However, the evacuation and personnel accountability portion of the drill was scheduled and was conducted on February 20, 1974. A review of this portion of the test was provided the inspector by R. Graybeal (DAEC) via telephone on February 20, 1974. This portion of the test of the preparedness plan is responsive to item 5c(1) of the Report Details Section of RO Inspection Report No. 050-331/74-04.
- (2) The Linn County Sheriff's Office was contacted by DAEC representatives by radio on February 13, 1974, and informed that a drill was in progress at DAEC. Road blocks were set up at two site access roads by the Sheriff's Office personnel. Confirmation that the road blocks were established was obtained within thirteen minutes after the initial call. This portion of the test of the Preparedness Plan is responsive to item 5c(2) of the Report Details Section of RO Inspection Report No. 050-331/74-04.
- (3) A communications check was made as part of the emergency drill on February 13, 1974, in which the following offsite support agencies were contacted:
 - . Palo Fire Department
 - . Iowa State Civil Defense Office
 - . Iowa State Highway Patrol
 - . Linn County Health Department
 - . Linn County Sheriff's Office
 - . Mercy Hospital

The time period from initiation of the drill until response and/or estimated response times were recorded. This portion of the test of the Preparedness Plan is responsive to item 5c(3) of the Report Details Section of RO Inspection Report No. 050-331/74-04.

- (4) A contaminated injury drill was conducted on February 13, 1974, which involved the response of an ambulance, transport of an individual with a simulated contamination injury to Mercy Hospital, and simulation of preparation for and treatment at the hospital. This portion of the preparedness plan test is responsive to item 5c(4) of the Report Details Section of RO Inspection Report No. 050-331/74-04.

d. Stocking and Locating Emergency Kits

The stocking of the emergency kit was completed and the kits were placed in the following locations according to a DAEC representative by February 19, 1974: (1) the Control Room, (2) the Emergency Control Center, (3) the Alternate Emergency Control Center, and (4) the IELP Building in Cedar Rapids. This action is responsive to item 5d of the Report Details Section of RO Inspection Report No. 050-331/74-04.

e. Stocking of Materials for Use in Personnel Decontamination

The materials necessary for personnel decontamination had been placed in the Radiation Safety Office which directly adjoins the personnel decontamination area. This action is in response to a portion of item 5e of the Report Details Section of RO Inspection Report No. 050-331/74-04.

f. Placement of Equipment and Supplies in the DAEC First Aid Room

The DAEC first aid room in the Administration Building was not completely stocked and ready for use at the time of this inspection. First aid services at the DAEC site have been and are currently supplied by the first aid facility maintained by Bechtel. DAEC representatives will continue to use this facility until the DAEC first aid room is made operative prior to Phase IV.

4. Status of Items Identified in Previous Inspections to be Completed Prior to Phase IV

RO Inspection Report No. 050-331/74-04 identified certain items requiring action prior to Phase IV. Although this inspection was directed primarily toward those items identified as requiring action prior to Phase I, the current status of the licensee's commitments on items to be accomplished prior to Phase IV is described below. Action on these items will be reviewed in a subsequent inspection.

a. Completion of Stocking of Items in the Emergency Coordination Center

The Emergency Coordination Center communications equipment and the majority of items necessary for full operation of the ECC had been placed in operation or were available for operation at the time of this inspection.

b. Plant Personnel Emergency Training

Training of plant emergency personnel had been initiated but not complete at the time of this inspection.

c. Onsite Fire Drill

The planned onsite fire drill in accord with PPIP-15 had not yet been held at the time of this inspection.

d. Conduct a Radiation Emergency Exercise

A radiation emergency exercise to be conducted in accord with PPIP-14 had not been carried out at the time of this inspection.

e. Alternate Emergency Coordination Center (AECC)

According to a representative of DAEC certain items of equipment necessary for the control of an incident from the AECC had been placed in service. However, the AECC was not visited during this inspection.

f. Contamination Control Measures and Training at Mercy Hospital

Information on the progress on this item was provided by a DAEC representative and is summarized below:

- (1) Fabrication of the HEPA filter holder for the ventilation system in the Emergency Operating Room for Radioactive Contaminated Patients (EOR-RCP) is in progress.
- (2) Modification of the drains in the floor and sink in the EOR-RCP has been completed.
- (3) The training of Mercy Hospital Emergency Response personnel had been initiated at the time of this inspection.
- (4) DAEC personnel are currently involved in review of the hospital procedures to assure implementation of the contamination control measures.

5. Preoperational Tests Reviewed

The following preoperational tests were reviewed:

No. 7884-12 Public Address System/Fire and Evacuation Alarm

The system test was completed on February 7, 1974, and was determined adequate to Phase IX. However, DAEC personnel indicate a desire to retest after both cooling towers are in operation.

No. 7884-99Y Sound Power Phone System

All system test blocks had been completed on February 14 and 15, 1974.

No. 7884-99G Radio Communications Systems

The systems components testing was completed on January 15, 1974.

6. External Telephone and Internal Telephone System Preoperational Test

This preoperational test package was not available for review because the test was in progress at the time of the inspection. A representative of DAEC reported at the management interview that the test of all phones had been completed except three which were yet to be installed and the preoperational test package was to be submitted to the Preoperational Test and Review Board.

7. Review of the Critique of the Preparedness Plan Drill of February 13, 1974

A written critique of the February 13, 1974, drill was reviewed with a representative of DAEC. As a part of this review, the importance of expeditiously evaluating and incorporating the recommendations contained in the critique were discussed.

8. Meteorological System

The inspector accompanied by the DAEC instrument technician and IE engineer responsible for the maintenance and operation of the meteorological instrumentation and DAEC's meteorological consultant, visited the meteorological instrument readout location and discussed the physical aspects and experience gained by DAEC from operation of the system since January 1971.

A document entitled, "Confirmation of DAEC Meteorological Systems Operability Prior to Initial Fuel Loading" which had been prepared was also discussed. The above document contains preventive maintenance schedules along with procedures for accomplishing the maintenance and copies of documents to indicate the calibration of the instruments used in systems tests were traceable to National Bureau of Standards or other accepted National Standards. Results of tests performed were also available for review.

9. Preparedness Plan Implementing Procedures (PPIP's)

The following PPIP's were reviewed and discussed with R. Graybeal during this inspection:

<u>PPIP No.</u>	<u>Title</u>	<u>Approval Date</u>
PPIP-1	Emergency Evacuation of Onsite Personnel	1-11-74
PPIP-2	Emergency Coordination Center Operations	2-11-74
PPIP-3	Off-Duty Plant Personnel Entry to Plant Site During Emergencies	1-11-74
PPIP-4	Determination of a Safe Habitable Area	1-11-74
PPIP-5	Determination and Treatment of Injuries, Radiation Exposure, and High Contamination of Individuals	1-11-74
PPIP-6	Personnel Decontamination	1-11-74
PPIP-7	Emergency Assignment Board Tag Duties	2-11-74
PPIP-8	Determination of Location of Initial Radiological Survey Using the MC Graph	1-11-74
PPIP-9	Site Boundary and Onsite Radiation Surveys	1-11-74
PPIP-10	Initial Offsite Radiological Survey	1-11-74
PPIP-11	Recording and Evaluation of Emergency Monitoring Data	2-11-74
PPIP-12	Procedural Plan to Contact Offsite Support Agencies	2-11-74
PPIP-13	Plant Personnel Emergency Training	1-11-74
PPIP-14	Annual Radiation Emergency Exercises	1-11-74
PPIP-15	Onsite Drills for Local Fire Department	2-12-74
PPIP-16	Instructions for Plant Emergency Drill Observed	1-11-74
PPIP-17	Re-entry and Recovery Operations	2-12-74
PPIP-18	Restoration to Normal Operations	1-14-74